

REMARKS

Claims 20 and 30 have been amended to further clarify the subject matter. Claims 26-29 are canceled. Support for the amendment to Claims 20 can be found, for example, from Figure 2 and page 5 lines 18-21 of the specification as originally filed. No new matter is added in this amendment. Claims 20, 21, 24, 25, 30 and 32 are currently pending in the application. In view of the amendments and comments as set forth herein, Applicant respectfully requests withdrawal of the rejection and reconsideration of the pending claims.

Claim Objection

The Examiner has objected to Claim 30 as indefinite for reciting the terms “nipple-like” and “stud-like.” Applicant has amended Claim 30 to eliminate these terms as suggested by the examiner. Therefore, applicant respectfully requests that this objection be withdrawn.

Claim rejections under 35 U.S.C § 103

The Examiner rejected Claims 20, 21, 24-30, 32 as being unpatentable over Bejean, et al. (U.S. 5,029,889), herein Bejean. The Examiner has also rejected Claims 25, and 27-30 as being unpatentable over Bejean in view of Loughney (U.S. 4,322,090). Applicant respectfully disagrees with the Examiner’s rejection for the reasons set forth below.

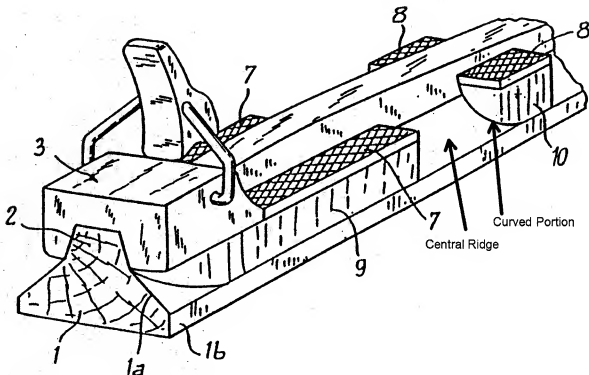
Claim 20, as currently amended recites, *inter alia*, “said binding plate being a *flat, one-piece plate that is thin relative to the ski*.” This construction of the binding plate allows the binding plate to exhibit mechanical properties that do not affect those of the ski in the central binding portion. The binding plate is formed such that any flexing of the ski corresponds to flexing of the one-piece binding plate. As a result, the binding plate does not interfere with the behaviors of the ski, and the ski behaves as if the binding plate were not present in the construction. Applicant respectfully submits that Bejean fails to disclose at least this feature of amended Claim 20.

Bejean teaches a cross country ski apparatus for supporting a shoe or boot. Bejean teaches the use of front and rear support elements for supporting the shoe or boot. The support

elements of Bejean are configurable based on the ability level of the skier and with respect to the type of skiing that is to be performed. Bejean, Abstract.

The Examiner cites to elements 7, 8, 9, and 10 of Bejean to teach the binding plate as claimed. The support elements of Bejean are formed as separate pieces as shown in Figure 1 of Bejean, reproduced below and highlighted by Applicant to show the central ridge on which front and rear support elements are mounted.

Fig:1



As illustrated in Figure 1, front support element 7 is formed on top of front intermediate element 9 to form a front support portion 7, 9. Intermediate element 9 is attached directly to the ski 1 as shown above. Rear support element 8 is formed on top of rear intermediate element 10 to form a rear support portion 8, 10. Rear intermediate element is also connected directly to the ski 1 such that the front and rear support elements are separated. Furthermore, Bejean teaches that "the support elements 7, 8 are constituted by layers of material affixed to the upper horizontal surfaces of intermediate elements 9, 10 themselves affixed to edges 1a of the ski...."

Bejean, col. 3 lines 40-44. Therefore, front support portion 7, 9 is formed separately from the rear support portion 8, 10. By contrast, Claim 20 recites wherein “said binding plate being a flat, *one-piece* plate that is thin relative to the ski.” Emphasis added. Therefore, applicant respectfully submits that Bejean fails to disclose at least this feature of Claim 20.

Bejean also fails to teach wherein the binding plate is formed as a flat plate. As illustrated in Figure 1 of Bejean, the ski is formed to have an inclined portion from the edge of the ski (i.e. 1a, 1b) to the rib portion 2. As such, the mounting of the intermediate portions 9, 10 and the support elements 7, 8 are formed to compensate for the inclination of the “central ridge” highlighted above by applicant. For example, Bejean teaches that “the support elements 7, 8 are constituted by layers of material affixed to the upper horizontal surfaces of intermediate elements 9, 10 themselves affixed to edges 1a of the ski and making it possible to ‘correct’ the slope of edges 1a of ski 1.” Bejean, col. 3 lines 40-45. As illustrated above, the correction of the slope of the edges is performed by forming a curved portion in mounting at least the intermediate portions 9, 10 as illustrated above. Therefore, applicant submits that Bejean fails to teach at least wherein the binding plate is formed as a flat plate.

Bejean also teaches that each of the intermediate portions 9, 10 and the support portions 7, 8 are formed as thick portions with respect to the ski 1 as illustrated in Figure 1. Bejean does not discuss the material used for intermediate elements 9 and 10, but given their shape and thickness, it can only be concluded that the flexibility of the ski will be affected significantly by their presence. The formation of the binding plate using thick portions rather than as a flat plate that is thin relative to the ski as taught by Bejean therefore affects the ability of the ski to flex. As a result, the ski cannot exhibit the behaviors of a ski not having the binding plate attached thereto as discussed above. By contrast, Claim 20 recites “said binding plate being a flat, *one-piece* plate *that is thin relative to the ski.*” Emphasis added. Claim 20 further recites “wherein said ski and said binding plate form an integral constructional unit in respect of mechanical properties with no damping volumes between the binding plate and the ski.” Therefore, applicant respectfully submits that Bejean fails to disclose at least these features of Claim 20.

Furthermore, Bejean teaches away from any modification or combination for forming a one-piece construction of a binding plate. Applicant notes that if a proposed modification would

render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). Bejean teaches that the support elements 7 and 8 are formed such that they may be adjusted based on the level of the skier and the type of skiing to be performed. Particularly, Bejean teaches that "the mechanical response characteristics of the support elements 7, 8 are selected with respect to the ability level of the skier." Bejean, col. 3 lines 46-48. The two piece construction of Bejean allows for the re-configuration of the support elements as necessary to form either rigid or soft material. Bejean teaches that "the front and rear support elements are made of materials having characteristics of mechanical response which can be identical or different." For example, Bejean discloses that "[t]he front and rear support elements are made of materials having characteristics which can be identical or different" Bejean, col. 2 lines 61-63. Therefore, Applicant respectfully submits that any modification of Bejean to teach a one-piece binding plate would frustrate the intended purpose of Bejean of providing re-configuration of the material for the support elements.

Discussion of Requirement to Show Unexpected Results

As previously discussed, the behaviors of the ski are affected by the presence of the binding plate on the ski. It is important to maintain the behaviors as much as possible, as if the binding plate was not present. The binding plate is generally fastened to the top face of the ski body and the materials and methods used in the fastening process can have appreciable effects on the properties of the ski. However, it is ideal if the fastening of the binding plate has minimal influence to the ski and thereby lead to the maximum performance during skiing.

A ski according to Claim 20 requires that the mounting aid or binding plate be bonded, without screws, over its whole surface with adhesive to the top face of the ski. The adhesive comprises a layer having a maximum thickness of 5 to 10% of a thickness of the mounting aid or binding plate, wherein said ski and said mounting aid form an integral constructional unit in respect of mechanical properties with no damping volumes between the mounting aid and the ski.

Applicant submits that a showing of unexpected results has been made with the previous response of September 17, 2010 and accompanying Declaration. As discussed in the previous response, the configuration of the ski set forth in Claim 20 provides almost no influence exerted from reinforcement of the binding plate to the cross country ski, which leads to a superior running performance of the ski. In the previously provided Declaration, Applicant provided experimental evidence showing that a ski according to the invention behaves very similar to the one without a binding plate. Declaration, Appendix A. The Declaration illustrates the overall behavior profiles of a ski without a binding plate and a ski with a binding plate according to the presently claimed invention, respectively. See Figures 1 and 2. These profiles are highly comparable and the difference between each data set is very small. This data proves that a binding plate according to the presently claimed invention indeed has almost no effect on the ski properties, and thereby allows the ski to behave like one without a binding plate.

The Examiner has also dismissed the evidence provided in the declaration regarding the results of the 2010 Olympic Games in Vancouver. As previously discussed, 82.5% of the medals during the 2010 Olympic Games in Vancouver won in cross country ski events were won with athletes using the binding plate of the invention (referred to as the NIS plate). The Examiner states that "the placing of Olympians does not have a direct reflection of the equipment used." Office Action, page 2. The Examiner may be arguing that the placing of Olympians is also a function of the skill of the skier. However, the applicant submits that that the data is based on all skiers in the Olympic Games, not just one skier. There are two possible conclusions that can be made based on this data. First, it may be concluded that the NIS plate improved the performance of the skiers on average that used the plate. In this case, the data is good evidence of the technical benefits of the invention that were not previously appreciated. The second conclusion that may be drawn is that on average, the best skiers choose to use the NIS plate of the invention. In this case, the data is again evidence that the binding plate of the invention is technically superior to other binding plates. Why else would the better skiers choose to use it over other options?

Discussion of Loughney

With respect to Claims 25, and 27-30, the Examiner relies upon Loughney to address other features. Particularly, the Examiner relies upon Loughney to teach a connection piece. Office Action, page 4. However, Applicant respectfully submits that Loughney fails to cure the deficiencies of Bejean.

Loughney teaches a ski mountaineering binding for alpine ski touring and downhill skiing. The binding of Loughney is configured to enable a release of the skier's boot such that a walking motion is available to the skier in a ski touring mode. Loughney, col. 4 lines 42-45. Loughney teaches that the configuration includes a touring heel plate 34 and a touring toe piece 32 with a sole plate 30 formed therebetween. Loughney, Figure 4. The sole plate 30 of Loughney is formed such that a skier may flex the sole plate 30 in order to disengage the boot from the touring heel plate 34. Loughney, col. 7 lines 18-23. However, Loughney fails to teach "said binding plate being a *flat, one-piece plate that is thin relative to the ski.*" Emphasis added. Rather, Loughney teaches a binding which is formed of at least three pieces such that a skier's boot may be easily disengaged from the binding on the ski.

In view of the foregoing, Applicant respectfully submits that Claim 20 is not obvious over the prior art and therefore should be in condition for allowance. As to Claims 21, 24-30 and 32, they incorporate all the features that Claim 20 has through their dependencies from Claim 20. Accordingly, these dependent claims should also be allowable for at least the same reasons that Claim 20 is allowable as well as for their own patentable features. Withdrawal of the rejection and consideration of the pending Claims 20, 21, 24, 25, 30, and 32 are respectfully requested.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure,

Application No.: 10/535,619
Filing Date: January 4, 2006

including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

Applicant wishes to draw the Examiner's attention to the following co-pending utility applications of the present application's assignee.

Serial Number	Title	Filed
11/813,610	SKI, OR SIMILAR DEVICE FOR SLIDING ON SNOW, HAVING A MOUNTING AID FOR A BINDING	August 21, 2007

CONCLUSION

Applicant has endeavored to address all of the Examiner's concerns as expressed in the outstanding Office Action. Accordingly, arguments in support of the patentability of the pending claim set are presented above.

In light of the above remarks, reconsideration and withdrawal of the outstanding rejections is respectfully requested. If the Examiner has any questions which may be answered by telephone, he is invited to call the undersigned directly.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: 12/27/10

By: 

Thomas R. Arno
Registration No. 40,490
Attorney of Record
Customer No. 20995
(619) 235-8550